Before the
**FEDERAL COMMUNICATIONS COMMISSION**
Washington, D.C. 20554

| | | |
|---|---|---|
| In the Matter of | ) | |
| | ) | |
| Telephone Number Portability | ) | CC Docket No. 95-116 |
| | ) | RM 8535 |

# COMMENTS OF GTE

GTE SERVICE CORPORATION,
on behalf of its affiliated domestic
telephone operating and wireless
companies

David J. Gudino
1850 M Street, N.W.
Suite 1200
Washington, D.C. 20036
(202) 463-5212

Jeffrey S. Linder
Wiley, Rein & Fielding
1776 K Street, N.W.
Suite 1100
Washington, D.C. 20006
(202) 429-7000

ITS ATTORNEYS

March 29, 1996

TABLE OF CONTENTS

## SUMMARY

The Telecommunications Act of 1996 ("Act") makes explicit principles already identified in this proceeding that should guide the Commission in implementing number portability. The Act unequivocally establishes a central role for the Commission in determining a form of service provider portability that is "technically feasible" and that does not impair the quality, reliability and convenience of the services provided over the public switched network. The Act also mandates a cost recovery mechanism for number portability that is "competitively neutral." As a general matter, a "competitively neutral" cost recovery mechanism is one that does not create an incentive for a customer either to stay with an existing provider/service or to move to a new provider/service to avoid any or all of the cost of portability.

Despite commendable efforts in various state proceedings, the industry is still far from identifying a "technically feasible" number portability solution. "Technically feasible" must not be equated with "technically possible." Cost and timing considerations must be integral components of "technical feasibility." AT&T's location routing number approach has been received favorably in a number of states but has yet to trialed or tested and still lacks reliable cost estimates as well as answers to a number of technical problems. More generally, the goal of maintaining a "seamless" network through the interworking of portability "islands" has been given almost no consideration in state proceedings.

Because no technically feasible solution has been identified, the Commission does not have sufficient information with which to designate a permanent solution at this time. Consistent with the Act, however, the Commission can issue regulations

directing the near-term implementation of service provider portability through proven, technically feasible means such as remote call forwarding, specifying that such regulations will be applicable until a permanent solution is designated.

At the same time, the Commission should: (1) develop competitively neutral cost recovery guidelines, (2) select proposed and/or ongoing state trials of different portability proposals (such as the trials in Illinois and California) to use as official sources for empirical data regarding their technical feasibility, (3) in conjunction with the host states, carefully monitor these trials to ensure that they progress to timely conclusions, (4) direct T1S1.3 to develop standards by a specific date to support the routing of ported calls between carriers, (5) direct INC or ICCF to develop agreements and procedures by a specific date for interworking between portability and adjacent non-portability areas, (6) require a comprehensive report of the empirical findings for each trial as it is completed and, (7) once all submissions have been made, allow a brief period for the industry to review the data and comment on which proposal should ultimately be selected and why. The entire process should be completed by no later than the first quarter of 1998.

After all of the foregoing has been completed, the data should be compiled into a standard "guidebook" for implementing number portability. The Commission should then consider delegating to the states the discretion to determine the specific timing of implementation in accordance with their local competition objectives, with implementation at the state level governed by the Commission's standard "manual."

Before the
**FEDERAL COMMUNICATIONS COMMISSION**
Washington, D.C. 20554

| | | |
|---|---|---|
| In the Matter of | ) | |
| | ) | |
| Telephone Number Portability | ) | CC Docket No. 95-116 |
| | ) | RM 8535 |

**COMMENTS OF GTE**

GTE Service Corporation ("GTE"), on behalf of its affiliated domestic telephone operating and wireless companies, submits the following comments in response to the Commission's Public Notice, DA 96-358, released March 14, 1996, in which the Commission solicits comments regarding the potential impact of the Telecommunications Act of 1996 ("Act") on the issues raised in the Commission's *NPRM*[1] in this docket.

## I. THE ACT MAKES EXPLICIT MANY OF THE CENTRAL PRINCIPLES IDENTIFIED IN THIS PROCEEDING THAT SHOULD GUIDE THE COMMISSION IN IMPLEMENTING NUMBER PORTABILITY

Central Role for the Commission. In its *NPRM*, the Commission tentatively concluded that it "should assume a leadership role in developing a national number portability policy."[2] The Act makes it unequivocal that the Commission is charged with determining the requirements for number portability, including cost recovery.[3] In this regard, GTE views the Commission as the only

---

1 *In the Matter of Telephone Number Portability*, Notice of Proposed Rulemaking, 10 FCC Rcd 12350 (1995) ("*NPRM*").

2 *NPRM* at 12357.

3 *See* Sections 251(b)(2) and 251(e)(2).

central body capable of ensuring that the standards for interfaces and routing mechanisms needed to properly route calls across all networks are established. These standards should allow carriers a degree of choice in how they will identify calls to ported numbers and how they will transmit the agreed-upon routing information across the standard interfaces. By allowing the flexibility necessary to adapt number portability to the numerous and varying network switching technologies deployed across the country, this approach will ensure that number portability is implemented in the most reliable, economical and timely manner possible.[4]

Service Provider Portability Required. Section 3(a)(46) of the Act defines the number portability required as one that allows customers "to retain, at the same location, existing telecommunications numbers . . . when switching from one telecommunications carrier to another" – *i.e.*, service provider portability.[5] As discussed more fully below, however, this section does *not* require the Commission to mandate a permanent portability solution at this time.

---

[4] Separating number portability into triggering and routing functions will allow each switch manufacturer and LEC to optimize both functions for its switch architecture and network configuration, thereby reducing costs and delays potentially resulting from a one-size-fits-all approach such as AT&T's Location Routing Number ("LRN") proposal.

[5] The Commission's definition of service provider portability is very similar: "Service provider portability refers to the ability of end users to retain the same telephone numbers (that is, the same NPA and NXX codes and the same line numbers) when changing from one service provider to another." *NPRM* at 12355.

"Technically Feasible" Number Portability. Section 251(b)(2) of the Act confirms the obvious: that number portability must be "technically feasible" before any local exchange carrier ("LEC") is required to provide it.

Maintenance of Quality, Reliability and Convenience. Section 3(a)(46) of the Act confirms the unanimous position taken by the LECs: that number portability must be implemented in a manner that does not impair the quality, reliability or convenience of the services provided over the public switched telephone network.[6] The importance of this mandate cannot be overstated. The public switched network cannot be compromised in order to make a particular number portability architecture possible.[7] Moreover, number portability cannot be implemented at the expense of eroding or making unavailable existing telecommunications services (including more advanced CLASS-type services) or new services that may be possible with current technology. Nor should it be implemented in a manner that causes unwarranted disruption of the technological innovation that has been the hallmark of this industry over the last several decades.

---

6 *See, e.g.,* Comments of GTE, CC Docket 95-116, filed September 12, 1995, at pp. 18-21.

7 The Commission need only recall past massive outages to be reminded of the need to maintain the integrity of the public switched network. The U.S. General Accounting Office ("GAO") found that during 1990 and 1991 over 1,000 outages occurred affecting over 69 million customers. The GAO identified software and hardware problems as two of the three main reasons for such outages. *See* U.S. General Accounting Office, Fact Sheet for the Chairman, Subcommittee on Telecommunications and Finance, Committee on Energy and Commerce, House of Representatives, GAO/RCED-93-79FS, Interruptions of Telephone Service.

Number Portability Cost Recovery. Though the viewpoints expressed in comments on the issue of cost recovery varied significantly, Section 251(e)(2) of the Act clearly mandates a cost recovery mechanism for number portability that is "competitively neutral." As a general matter, a "competitively neutral" cost recovery mechanism is one that does not create an incentive for a customer either to stay with an existing provider/service or to move to a new provider/service to avoid any or all of the cost of portability.[8] Accordingly, any scheme that would require LECs to shoulder more than their proportionate share of the costs of number portability would directly conflict with the Act as such a scheme would force the costs of doing business for LECs to skyrocket, giving other competitors in the local exchange market a distinct competitive advantage.[9]

## II. NO "TECHNICALLY FEASIBLE" LONG TERM NUMBER PORTABILITY SOLUTION HAS BEEN IDENTIFIED

Despite commendable efforts in various state proceedings, the industry is still far from identifying a "technically feasible" number portability solution. In this regard, "technically feasible" must not be equated with "technically possible." With technological advances being the rule rather than the exception in this industry, virtually anything can be made technically possible, given the right price and a sufficient amount of time. For this reason, cost and timing considerations

---

[8] More specifically, "competitively neutral" means that all providers of telecommunications services must share equally in supporting the costs associated with providing number portability. One way to achieve this objective is through a uniform end user charge so that no customer can avoid paying their fair share of number portability costs by switching carriers or services.

[9] GTE would support a pooling of costs approach that would assess every customer a set amount, regardless of their service provider.

cannot be separated from the concept of technical feasibility. Without cost and timing as essential components, an ideal solution could be developed in theory only to require massive expenditures and several decades to be realized.[10]

Although AT&T's LRN proposal has been favorably received in a number of states, reliable cost estimates for LRN have not been established[11] nor have all of the technical problems associated with LRN been resolved. For example, the Generic Requirements[12] released by AT&T states that the impacts of LRN on Operations Systems "is outside the scope" of the document.[13] Before LRN can be deemed a viable option, Operations Systems impacts must be identified and addressed. Basic functions such as how a service provisioning system will assign a telephone number for a new service request[14] or how a trouble report will be linked to the provider servicing that number have yet to be resolved.

---

10 In addition, the technical feasibility of a given proposal must be determined on a broad scale in order to avoid the adoption of a proposal that may be technically feasible under one set of conditions (*e.g.,* in a densely populated area) but not technically feasible under another (*e.g.,* in a rural, less populated area).

11 Indeed, in a recent letter to the Commission, the best AT&T could do was estimate the cost of implementing its LRN proposal at $0.20 to $0.30 per line "based on experience gained deploying 800 number portability." The letter provided no explanation as to how the experience with 800 number portability was adapted to implementing the LRN proposal nor was a "cost study" referenced by AT&T provided or otherwise described in any detail. *See* AT&T Letter from R. Gerard Salemme to Ms. Regina Keeney, dated March 12, 1996, page 2.

12 Generic Requirements, Issue 1.00, "Generic Switching and Signaling Requirements for Number Portability," ed. J.J. Lichter, Lucent Technologies, February 12, 1996 ("Generic Requirements").

13 *Id.* at p. 22.

14 Numbers ported out of a switch will be marked as vacant numbers. Therefore, under existing procedures, a provisioning system would reassign these numbers to new service orders. This would result in the same number being assigned to two different customers within the portability area.

In addition to these types of problems, AT&T's Generic Requirements do not address the impact of LRN on ordering, provisioning, maintenance, service testing, service billing and other billing systems, or Network Management systems. AT&T has dismissed these issues on the grounds that they would be impacted irrespective of what number portability solution was chosen.[15] This approach ignores the fact that different proposals will create different problems. The fact that all proposals may impact the same area does not obviate the need to evaluate the potential magnitude of that impact for each proposal as the resulting costs may vary considerably under the various options available. [16] These are just *some* of the troubling areas of uncertainty regarding LRN.

More generally, the goal of maintaining a "seamless" network through the interworking of portability "islands" has been given almost no consideration in state proceedings. Because some areas inevitably will have portability before it is implemented in adjacent areas, a uniform method of handling calls between them will be indispensable. The importance of this issue notwithstanding, industry workshops have not even determined how these areas will be identified, much less how the calls between them will be handled.[17]

---

15 That AT&T is not reluctant to take such a position stems from the perceived bias of state workshops toward "comparative analysis" in which implementation problems "common" to all proposals are either given cursory attention or ignored entirely.

16 These impacts were not considered in California and will not be addressed in Illinois.

17 The issue of the inherent (albeit limited) location portability currently available also has not been addressed. A degree of location portability is currently available when a customer moves to a new location within the area served by the provider's switch. A problem will arise with service provider portability when

For all of the foregoing reasons, GTE urges the Commission not to embrace a particular proposal such as LRN as a permanent solution merely because it has been received favorably elsewhere, particularly when such a critical decision is not immediately required by the Act. The technical and economic impacts of any proposed solution must be rigorously examined and thoroughly tested before that proposal can be deemed a viable solution for the industry. Thus far, no proposal has fully undertaken, much less passed such a test.

## III. THE COMMISSION CAN MEET THE REQUIREMENTS OF THE ACT WITHOUT PREMATURELY DESIGNATING A PERMANENT PORTABILITY SOLUTION

Section 251(b)(2) of the Act places the duty on each local exchange carrier "to provide, to the extent technically feasible, number portability in accordance with the requirements prescribed by the Commission." And as noted above, the Act requires service provider portability that is "technically feasible" and which does not impair service "quality, reliability, or convenience." In turn, the implementing provisions of Section 251(d)(1) give the Commission six months from the date of enactment -- until August 8, 1996 -- to "complete all actions necessary to establish regulations to implement" number portability.

---

a customer moves to a new provider whose switch serves an area larger than the old provider's rate center. Should that customer move within the area served by the new provider's switch, and within the old provider's serving area, but beyond the old provider's rate center service boundary, service provider portability will be lost because that customer will no longer be able to go back to the old provider without changing numbers to reflect the new rate center. Such a move by a customer will also create technical and service billing problems.

Of equal importance in this context, however, is what the Act does *not* do: (1) it does not require that a particular number portability architecture be used, (2) it does not require any type of flash-cut to service provider portability on a particular date,[18] and (3) it does not preclude the Commission from issuing regulations specifying the provision of interim portability measures such as remote call forwarding ("RCF") until a permanent solution can be identified.

The Commission itself has given notice of its intent to issue an order in this docket in May 1996. This date, coupled with the Act's deadline of August 8, 1996, means that the Commission has as little as two months or as many as five months left to secure all of the information it needs to issue regulations regarding number portability. GTE submits that even with five months, the Commission does not have enough time to obtain all of the information necessary to issue final regulations implementing a permanent number portability solution. As discussed above, the industry has not yet identified a "technically feasible" permanent solution and, as discussed below, the only way to do this is by undertaking aggressive additional steps.

Under these circumstances, the Commission should issue regulations directing the near-term implementation of service provider portability through proven, technically feasible means such as remote call forwarding, specifying that such regulations will be applicable until a permanent solution is designated.

---

[18] Because of current technical limitations, a flash-cut would not be possible in any event. Existing analog switches must be upgraded to digital technology before they will be able to support portability. Complete SS7 technology and a complete change-out of MF trunking also will be required to fully support number

In this way, the Commission can satisfy the requirements of the Act while allowing itself and the industry the time needed to identify a permanent solution.[19]

At the same time, the Commission should: (1) develop competitively neutral cost recovery guidelines, (2) select proposed and/or ongoing state trials of different portability proposals (such as the trials in Illinois[20] and California) to use as official sources for empirical data regarding their technical feasibility, (3) in conjunction with the host states, carefully monitor these trials to ensure that they progress to timely conclusions,[21] (4) direct T1S1.3 to develop standards by a specific date to support the routing of ported calls between carriers, (5) direct INC or ICCF to develop agreements and procedures by a specific date for interworking between portability and adjacent non-portability areas, (6) require a

---

portability.

19 In its *NPRM*, the Commission appeared to recognize the possible need to transition from a near term interim number portability solution to a longer term solution. *See NPRM* at 12368-12372. In any event, any concern that an immediate transition to a long term solution would not be possible has proven well-founded.

20 *See* Ex Parte Statement from James K. Smith of Ameritech to William F. Caton, filed in this docket on February 21, 1996 (attaching *ICC Number Portability Workshop Progress Report*). In connection with Ameritech's ex parte statement, it should be noted that GTE's agreement to stipulate to LRN as the call model architecture for the Chicago area (MSA-1) should not be construed as GTE's acceptance of LRN as the architecture of choice. GTE stipulated to LRN to facilitate the Illinois portability trial. The Illinois trial, however, should not be the only trial monitored by the FCC.

21 The Commission and the host state should also ensure that the trials are rigorous and robust, and will generate data regarding, among other things, impact on switches, signaling networks, end-to-end performance and support systems. In addition, the Commission should clarify that any state which mandates a specific form of number portability prior to the completion of this process assumes the risk of not being in compliance with final federal standards.

comprehensive report of the empirical findings for each trial as it is completed and, (7) once all submissions have been made, allow a brief period for the industry to review the data and comment on which proposal should ultimately be selected and why. The entire process should be completed by no later than the first quarter of 1998.

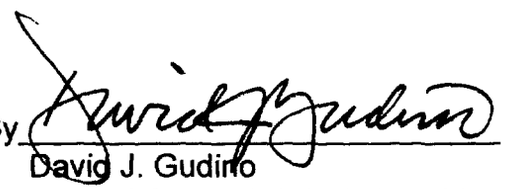
After all of the foregoing has been completed, the data should be compiled into a standard "manual" for implementing number portability. The Commission should then consider delegating to the states the discretion to determine the specific timing of implementation in accordance with their local competition objectives, with implementation at the state level governed by the Commission's standard "manual."

## IV. CONCLUSION

In addition to its basic requirement for service provider portability, the Act makes it clear that number portability must be technically feasible and that its costs must be recovered in a competitively neutral manner. In the near term, these requirements can be met through interim portability measures such as RCF. Because uncertainties regarding technical impacts and implementation costs still plague the various proposals vying to become the designated permanent solution, including the LRN model, the Commission should follow the seven steps suggested above to arrive at a long term solution. The Act does not compel nor does the extent of existing information regarding the various proposals permit the immediate designation of that solution.

Respectfully submitted,

GTE SERVICE CORPORATION,
on behalf of its affiliated domestic
telephone operating and wireless
companies

By 

David J. Gudino
1850 M Street, N.W., Suite 1200
Washington, D.C. 20036
(202) 463-5212
0322A

Jeffrey S. Linder
Wiley, Rein & Fielding
1776 K Street, N.W.
Suite 1100
Washington, D.C. 20006
(202) 429-7000

March 29, 1996

ITS ATTORNEYS

Certificate of Service

I, Judy R. Quinlan, hereby certify that a copy of the foregoing "Comments of GTE"" has been mailed by first class United States mail, postage prepaid, on the 29th day of March, 1995 to all parties of record.

Judy R. Quinlan